

ABSTRACT

A system and method for controlling the speed of a turbine
5 engine, the turbine engine being operative to provide
power to a primary load. When a decrease in the power
requirement of the primary load is detected, at least a
portion of the power generated by the turbine engine is
redirected to a secondary load, thereby maintaining the
10 speed of the turbine engine below a rated maximum speed.
In the example of a turbine-powered train in which the
turbine engine provides power to electric traction motors
driving the wheels of the train, when a wheel spin is
detected, at least a portion of the power generated by the
15 turbine engine is diverted from the respective electric
traction motor to rheostats for conversion to heat.